

L152.096

PATENT SPECIFICATION

DRAWINGS ATTACHED

L152.096



Date of filing Complete Specification: 1 Feb., 1968.

Application Date: 24 Feb, 1967.

No. 8868/67.

Complete Specification Published: 14 May, 1969.

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Index at acceptance:—B8 P(2D, 8J, 9B2); B8 D(3A, 7M, 7P1, 7PY); B8 T(2C, 4A, 4F)
Int. Cl.:—B 65 d 43/10

COMPLETE SPECIFICATION

Container having a Detachable Lid

I, SYDNEY WALTER VIVIAN DAVIES, a British Subject, of 9, High Street, Harrold, Bedfordshire, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to a container having a detachable lid and is particularly concerned with a container for pills, capsules, tablets, matches or other small articles. An object of the invention is to provide a container which cannot readily be opened by a child and which therefore can be safely used for articles such as those listed hereinbefore.

According to the invention, a container comprises a box-like body and a detachable lid therefor, the body being cylindrical, except for a pair of diametrically-opposite flat wall portions, and having a radially outwardly extending lip on each of the part-cylindrical wall portions defined between the flat wall portions and the lid being of shallow cylindrical shape and having a radially inwardly extending flange on the free end of its cylindrical wall, the lid and the body each being resiliently deformable and the dimensions of the cylindrical wall of the lid, the flange and the lips being such that the lid can be pushed on to the body to cause the flange to be snapped under the lips, thereby to hold the lid tightly on the body, the lid being removable by pressing the flat side wall portions of the body towards each other, thereby to cause the part-cylindrical wall portions to be pulled inwardly towards each other and hence to decrease the diametrical distance across the lips, and by pressing opposed portions of the cylindrical wall of the lid towards each other to deform the lid to an elliptical shape of which the diameter across the lips of the body is increased, whereby simultaneous deformation of the body and the lid will cause the flange to be disengaged from underneath the lips.

Conveniently the body and the lid are each

made of a resiliently deformable material such as a synthetic plastics material. Additionally or alternatively, spring means, for example a reinforcing metal spring, may be provided to oppose resiliently the aforesaid deformation of the flat wall portions of the body or the aforesaid deformation of the lid to an elliptical shape or both.

By way of example a container in accordance with the invention will now be described with reference to the accompanying drawings, in which:—

Figure 1 shows the body of the container fitted with the lid and indicates how the body should be gripped during the detaching of the lid;

Figure 2 is a plan view of the container showing the lid fitted on to the body;

Figure 3 is a section on the line III—III in Figure 2;

Figure 4 is a plan view of the container showing both the lid and the body deformed to permit the removal of the lid and,

Figure 5 is a section of the line V—V in Figure 4.

Referring to Figures 1, 2 and 3, the container comprises a box-like body A of cylindrical form except for a pair of diametrically opposite flat wall portions 1 and a radially-outwardly extending lip 2 on each of the part-cylindrical wall portions 3 defined between the flat wall portions. The body is open at its upper end when not fitted with a lid and is permanently closed by a bottom wall 4.

The lid B is of shallow cylindrical shape and has an upper end wall 5, a cylindrical wall 6 and a radially-inwardly extending flange 7 on the free end (i.e. the lower end as shown in the Figures) of the cylindrical wall 6.

Both the body and the lid are made from the same or different resiliently deformable material, such as a deformable synthetic plastics material. The dimensions of the cylindrical wall 6 of the lid, the flange 7 and the lips

2 are such that the lid B can be fitted onto the body A by pressing the lid downwardly until the flange 7 has snapped under the lips 2 and is closely fitted thereon, as is shown in Figure 3. The lid B cannot then be withdrawn from the body A by pulling the body and the lid apart axially. Instead, the lid B is removed by gripping the flat wall portions 1 of the body A, in one hand, as indicated in Figure 1 and by gripping the lid B, in the other hand, across the portions of the cylindrical wall 6 which extend beyond the flat wall portions 1. Then by simultaneously squeezing the flat wall portions 1 towards each other and by squeezing the lid to an elliptical shape, the diametrical distance across the pair of lips 2 will become shorter as the part-cylindrical wall portions 3 will be pulled towards each other by the depression of the flat wall portions 1 and the diametrical distance of the lid across the lips 2 will be increased. This simultaneous deformation of the body A and the lid B is indicated in Figure 4 and has the effect of causing the flanges 7 to be disengaged from beneath the lips 2, as indicated in Figure 5. Thus the lid B can now be lifted from the body A. As the removal of the lid B requires simultaneous squeezing of the body A by one hand and of the lid B by the other hand, it would be extremely difficult for a child to remove the lid. Therefore the container is safe to use for articles such as pills, capsules, tablets or matches.

Additionally or alternatively to making the body and the lid of a deformable material, spring means such as metal reinforcing strips may be provided to oppose resiliently the squeezing of the flat wall portions 1 and the cylindrical wall 6.

WHAT I CLAIM IS:—

1. A container comprising a box-like body and a detachable lid therefor, the body being cylindrical, except for a pair of diametrically-opposite flat wall portions, and having a radially outwardly extending lip on each of the part-cylindrical wall portions defined between the flat wall portions and the lid being of shallow cylindrical shape and having a radially inwardly extending flange on the free end of

its cylindrical wall, the lid and the body each being resiliently deformable and the dimensions of the cylindrical wall of the lid, the flange and the lips being such that the lid can be pushed on to the body to cause the flange to be snapped under the lips, thereby to hold the lid tightly on the body, the lid being removable by pressing the flat side wall portions of the body towards each other, thereby to cause the part-cylindrical wall portions to be pulled inwardly towards each other and hence to decrease the diametrical distance across the lips, and by pressing opposed portions of the cylindrical wall of the lid towards each other to deform the lid to an elliptical shape of which the diameter across the lips of the body is increased, whereby simultaneous deformation of the body and the lid will cause the flange to be disengaged from underneath the lips.

2. A container as claimed in claim 1 in which the body and the lid are each made of a resiliently deformable material.

3. A container as claimed in claim 2 in which the resiliently deformable material is a deformable synthetic plastics material.

4. A container as claimed in any one of the preceding claims in which spring means are arranged to oppose resiliently the deformation towards each other of said flat wall portions of the body.

5. A container as claimed in any one of the preceding claims including spring means arranged to oppose resiliently the deformation of the lid to an elliptical shape, as aforesaid.

6. A container as claimed in claim 4 or 5 in which said spring means comprises spring metal strips.

7. A container constructed and arranged substantially as described herein and shown in the accompanying drawings.

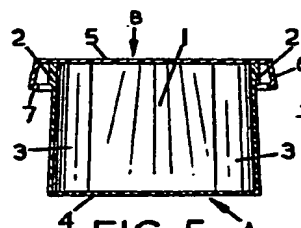
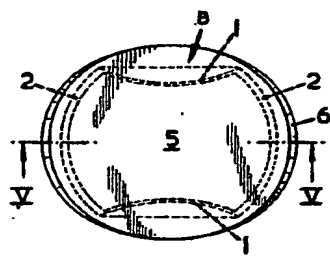
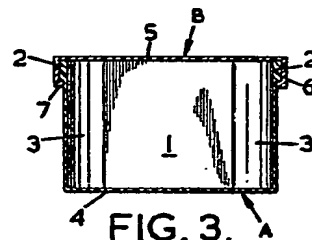
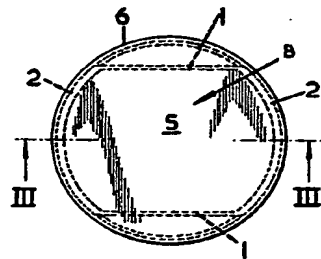
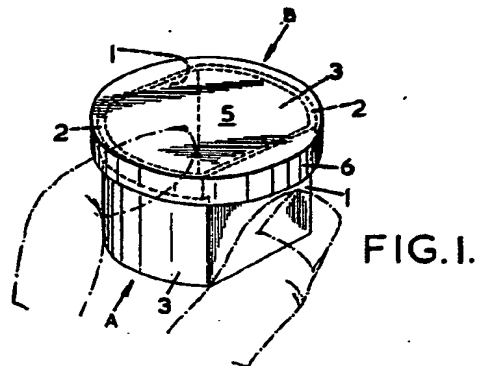
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COMPLETE SPECIFICATION

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